## **ABSTRACT**

A soft shell, flexible storage tank is provided, including corners of an improved configuration adapted to resist leaks. The walls of the tank and the corners are relatively more rounded and larger in radius than those of conventional flexible tanks. The walls and the improved corners act together to resist leaks. The rounded corners tend to reduce the effective pressure in the tank walls by loading the seams predominantly in shearing stress when the tank is filled with a liquid. The rounded corners are developed as panels, which are thermally bonded to produce secure and reliable liquid-tight seams. Each of the panels is bonded by lapped seams to others of the panels. Each of the rounded corners includes a generally triangular corner that is bonded to at least three other panels. In effect, the flexible storage tank functions as a pressure vessel, which tends to resist leakage.